



Beyond average:

Designing for variability with Universal
Design for Learning

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Welcome & Norms

- [Hayley Orndorf](#), BioQUEST
- Norms
 - State your name before speaking
 - Use channels that work for you
 - Consider adding your pronouns to your name



Outline

- Welcome & Norms
- Universal Design for Learning
 - CAST
 - Cultivating a UDL Mindset
 - Connections to other approaches
- Strategies for implementing UDL
- Resources

Universal Design for Learning



Universal Design

(CAST, 2018)

The Universal Design for Learning Guidelines

CAST | Universal learning has no limits

	Provide multiple means of Engagement <small>Address: Memory: The "WHY" of Learning</small>	Provide multiple means of Representation <small>Recognize: Memory: The "WHAT" of Learning</small>	Provide multiple means of Action & Expression <small>Strategic: Memory: The "HOW" of Learning</small>
Access	Provide options for Recruiting Interest <ul style="list-style-type: none">Optimize individual choice and autonomyOptimize relevance, value, and authenticityIncorporate choice and discussion	Provide options for Perception <ul style="list-style-type: none">Offer ways of customizing the display of informationOffer alternatives for auditory informationOffer alternatives for visual information	Provide options for Physical Action <ul style="list-style-type: none">Key the methods for response and navigationOptimize access to tools and assistive technologies
Method	Provide options for Sustaining Effort & Persistence <ul style="list-style-type: none">Highlight salience of goals and objectivesSet demands and resources to optimize challengeFoster collaboration and communityIncorporate meaningful feedback	Provide options for Language & Symbols <ul style="list-style-type: none">Clarify vocabulary and symbolsClarify syntax and structureSupport decoding of text, mathematical relations, and symbolsPromote understanding across languagesAccess through multiple media	Provide options for Expression & Communication <ul style="list-style-type: none">Use multiple means for communicationUse the medium best for construction and compositionBuild fluency with graduated levels of support for practice and performance
Information	Provide options for Self Regulation <ul style="list-style-type: none">Promote expectations and beliefs that optimize motivationFacilitate personal coping skills and strategiesEnable self-assessment and reflection	Provide options for Comprehension <ul style="list-style-type: none">Activate or supply background knowledgeHighlight patterns, critical features, big ideas, and relationshipsCreate meaningful processing and visualizationMaximize transfer and generalization	Provide options for Executive Functions <ul style="list-style-type: none">Enable appropriate goal settingSupport planning and strategy developmentFacilitate managing information and resourcesEnhance capacity for monitoring progress
Goal	Expert learners who are... Purposeful & Motivated	Resourceful & Knowledgeable	Strategic & Goal-Directed

udlguidelines.cast.org | © CAST, Inc. 2018 | Suggested Citation: CAST (2018). Universal design for learning guidelines, version 2.2 [graphic organizer]. Wakefield, MA: Author.



UDL Guidelines

	AFFECTIVE NETWORKS: The WHY of Learning	RECOGNITION NETWORKS: The WHAT of Learning	STRATEGIC NETWORKS: The HOW of Learning
	Provide multiple means of Engagement For purposeful, motivated learners, stimulate interest and motivation for learning	Provide multiple means of Representation For resourceful, knowledgeable learners, present information and content in different ways	Provide multiple means of Action & Expression For strategic, goal-directed learners, differentiate the ways that students can express what they know
Access	Provide options for Recruiting Interest	Provide options for Perception	Provide options for Physical Action
Build	Provide options for Sustaining Effort & Persistence	Provide options for Language & Symbols	Provide options for Expression & Communication
Internalize	Provide options for Self Regulation	Provide options for Comprehension	Provide options for Executive Functions
Goal	Purposeful & Motivated	Resourceful & Knowledgeable	Strategic & Goal Driven

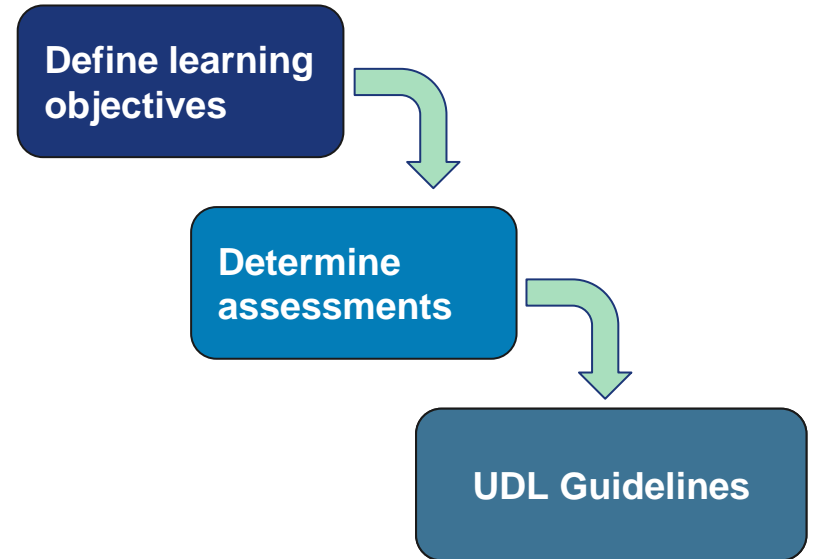


Cultivating a UDL Mindset

- UDL Framework ≠ Checklist
- Balancing a mindset with practical implementation
- Connecting UDL to other approaches

Universal Design for Learning & Backwards Design

- Complementary approaches
- UDL provides strategies for designing instruction that plans for learner variability.





Strategies for applying UDL

- Identify how you are already implementing UDL
- Consider "pinch points" & "plus ones"
 - **Pinch point:** Aspects of the lesson where learners have questions, assessment questions that are frequently missed, or places you have to re-teach .
 - **Plus one:** Selecting **one** more way to engage learners, represent material, or allow learners to demonstrate their knowledge and skills.

(Tobin & Behling, 2018)



Questions & Discussion

- How do you already incorporate UDL in your teaching?
- Which aspects of UDL would be most challenging to implement?
- Share a common "pinch point" for your learners.
 - Which UDL checkpoint could act as a "plus one"?



Resources

- [Getting Started with Universal Design](#)
- [Dewsbury & Brame's Inclusive Teaching Guide](#)
- [STEM OER Accessibility Framework](#)